

CLAIMS

1. A beam member for a roof arrangement, the beam member comprising a main support member and a rafter support member for supporting a rafter assembly, the rafter support member extending outwardly from the main support member, wherein securing means is provided on the rafter support member at an edge region of the rafter support member, the securing means comprising upstanding means extending from the rafter support member and adapted to cooperate with a part of a securing member of a rafter assembly.
2. A beam member according to claim 1 wherein the upstanding means comprises a first upstanding member extending from the rafter support member and a second member extending from the first member back toward the rafter support member.
3. A beam member according to claim 2 wherein the second member extends inwardly of the rafter support member, and the upstanding means defines a recess to receive a cooperating part of a securing member of the rafter assembly, the recess allowing said cooperating part to move to accommodate a pre-selected position of the rafter assembly.
4. A beam member according to claim 3 wherein the securing means includes a pivot receiving means comprising a curved portion of the second member for receiving a pivot on the securing member, whereby the securing means allows the rafter assembly to pivot to the desired position about the pivot receiving means.
5. A beam member according to claim 3 wherein the securing means includes a stop member to prevent movement of the co-operating part beyond it, the securing means including a holding portion, whereby the co-operating part of the rafter is held between the recess and the holding portion.
6. A beam member according to claim 5 wherein the rafter support member

extends outwardly in opposite directions from the main support member, each of said rafter support members comprising said securing means.

7. A beam member according to claim 5 wherein the, or each, rafter support member is provided along one edge region of the main support member, and a further rafter support member is provided along the opposite edge region of the main support member, the further rafter support member comprising one of said securing means.

8. A beam member according to claim 7 wherein the second rafter support member extends on opposite sides of said main support member, and each securing means is adapted to engage on an outward surface thereof of the holding member for a cap to be secured to the beam member.

9. A beam member according to claim 1 wherein the upstanding means comprises a step extending outwardly of the rafter support member and adapted to cooperate with a detent on the securing member of a rafter assembly.

10. A beam member according to claim 9 wherein the upstanding means comprises a first upstanding member extending from the rafter support member and a second member extending from the first member back toward the rafter support member outwardly of the rafter support member.

11. A beam member according to claim 9 wherein the rafter support member includes means for holding a cap engaging member.

12. A beam member according to claim 11 including a rafter support member on opposite sides of the main support member wherein the rafter support members are shaped to provide a re-entrant aperture to hold the cap engaging member.

13. A roof assembly comprising a beam member as claimed in claim 1 and a

rafter assembly, wherein the rafter assembly comprises a rafter and a securing member on the rafter to secure the rafter assembly to the beam member, the securing member including a co-operating part which can cooperate with securing means on the beam member to secure the rafter assembly to the beam member.

14. A roof assembly according to claim 13 wherein the cooperating part on the securing member of the rafter assembly can be received in a recess in the securing means to secure the rafter assembly to the beam member.

15. A roof assembly according to claim 14 including the rafter comprises a glazing bar, and the securing member comprises capping means on one end of the glazing bar, the capping means comprising a first capping member, having the securing member thereon, and a second capping member adjustably attached to the first capping member.

16. A roof assembly according to claim 15 wherein the first capping member includes holding means for holding a fastening member to fasten the first capping member to the glazing bar.

17. A roof assembly according to claim 16 wherein the holding means comprises a channel member defining a channel having an open side and inwardly extending flange members extending from opposite side walls of the channel member part way across the open side, whereby the channel can receive the head of a bolt.

18. A roof assembly according to claim 15 wherein each of the first and second capping members comprise respective first and second adjustment means which cooperate with each other to allow adjustment means which cooperate with each other to allow adjustment of the portion of the first capping member relative to the second capping member.

19. A roof assembly according to claim ~~15~~ 18 wherein the first and second

adjustment means cooperate with each other to adjust the height of the capping means for different heights of glazing bar.

20. A roof assembly according to claim 18 wherein the first adjustment means comprises a planar member having a plurality of outwardly extending detents arranged in succession in the direction of adjustment of the first and second adjustment means.

21. A roof assembly according to claim 18 wherein the second adjustment means comprises a pair of generally parallel planar members having a plurality of inwardly extending detents arranged in succession in the direction of adjustment of the first and second adjustment means.

22. A roof assembly according to claim 15 wherein the second capping member includes a curved portion to engage the glazing bar, wherein the curved portion subscribes an arc and the radius of the arc extends generally from the pivot on the securing member of the first capping member.

23. A roof assembly according to claim 13 wherein the securing member comprises a fastening portion to secure thereto a fastening means for holding the rafter, the securing member further including a securing formation to cooperate with a step provided on the upstanding means to secure the securing member thereto.

24. A roof assembly according to claim 23 wherein the fastening portion includes a channel member defining a channel having an open side and a pair of flanges extending inwardly from opposite side walls of the channel member part way across the open side.

25. A roof assembly according to claim 23 wherein the securing member includes a stop member to engage the rafter support member to prevent or inhibit movement of the clip holding means.

26. A glazing bar comprising a main support member and a cap engaging member on an edge region of the main support member, the cap engaging member comprising a detent portion extending from said edge region back towards an opposite edge region of the main support member to engage a selected one of a plurality of corresponding detents on a cap to be engaged by the cap engaging member.
27. A glazing bar according to claim 26 wherein the cap engaging member includes two of said detent portions, each extending on opposite sides of the main support member back toward said opposite edge thereof.
28. A glazing bar according to claim 26 wherein the main support member is formed from two elements secured together wherein the cap engaging member is in the form of folded back portions at the edge region of each element.
29. A glazing bar according to claim 26 wherein a second cap engaging member extends outwardly from said opposite edge region of the main support member and comprises an upstanding member extending toward the first cap engaging member.
30. A glazing bar according to claim 29 wherein the second cap engaging member further includes a curved portion extending inwardly from the upstanding member, the curved portion being adapted to engage a part of a second cap, whereby the curved portion is so curved such that said part of the second cap extends in use substantially tangentially to the curved portion.
31. A glazing bar according to claim 29 wherein the second cap engaging member extends from the support member in substantially opposite directions, and the cap engaging member comprises two of said upstanding members and a curved portion on each upstanding member.
32. A glazing bar according to claim 29 wherein the second cap engaging member includes at least one outwardly extending strip, the or each strip

extending from the main support member.

33. A glazing bar according to claim 32 wherein the second cap engaging member includes first and second outwardly extending strips extending in opposite directions to each other.

34. A glazing bar according to claim 32 wherein the or each of said outwardly extending portions includes a raised portion so shaped that a fastening member can extend through said raised portion such that a part of the fastening member, engages the raised portion, substantially tangentially therewith.

35. A glazing bar according to claim 26 wherein the, or each, detent portion on the first cap engaging member is adapted to co-operate with a selected detent formation on said first cap, whereby the position of the first cap on the glazing bar may be adjusted.

36. A glazing bar according to claim 35 wherein each of said detent formations is provided with a plurality of inwardly extending triangular detents arranged one after the other on said first cap, the respective triangular detents closest to the further cap have a width which is less than the width of succeeding triangular formations further away from said further cap.

37. A glazing bar according to claim 35 wherein each detent formation includes three of said triangular detents.

38. A ridge end member for a hipped roof arrangement, the ridge end member comprising a plurality of segments extending outwardly from a hub member, and each segment comprising an elongate mounting member on an edge thereof opposite the hub member to which a plurality of glazing bars can be mounted.

39. A ridge end member according to claim 38 wherein each mounting

member is attached to its respective segment by a length of material having a thickness which is less than the thickness of the respective mounting member.

40. A ridge end member according to claim 38 wherein the ridge end member further includes a plurality of sleeves, wherein at least a respective one of said sleeves is slidable over a respective mounting member.

41. A ridge end member according to claim 40 wherein the mounting members are of a substantially circular cross-section, and the sleeves have a cross-section corresponding to the mounting members, each of the mounting members being pivotable about its principal axis on the respective mounting member.

42. A ridge end member according to claim 40 wherein each of the sleeves defines a groove for receiving fastening means to fasten a glazing bar to the respective sleeve.

43. A ridge end member according to Claim 42 wherein the hub member is provided to connect the ridge end to a ridge part of the roof.

44. A ridge end member according to claim 43 wherein the groove has a generally T-shaped configuration and the connecting member is of a T-shaped configuration which has first and second elongate slots on either arm of the T, a recess defined in the body of the T, and a further elongate slot at the end of the T.

45. A ridge end member according to claim 40 wherein a connecting device is provided to connect the ridge end member to said part of the roof arrangement, the connecting device comprising a first connecting projection receivable in the recess, and a second connecting projection attachable to said part of the roof.

46. A ridge end member according to claim 45 wherein an attachment member extends between the first and second connecting projections, the

attachment member being provided with apertures through which fastening means, can extend to be received in first and second slots defined in the attachment member, and the first connecting projection being provided with a bore to be arranged in register with a third slot and connected thereto through suitable connecting means.

47. A ridge end member according to claim 48 wherein the connecting device is provided with indicia to represent the angle to the horizontal at which the glazing bars should extend therefrom.

48. A ridge end member according to claim 47 wherein the indicia are in the form of graduations provided on the attachment member and are so arranged that alignment of the top of the hub member with a selected one of the graduations indicates the angle at which the glazing bars should extend from the ridge end member.

49. A wing member for a valley rafter assembly, the wing member comprising first and second elements secured together, wherein each of the first and second elements comprises a portion of a mounting formation, and the first and second elements being arranged such that the mounting portions together form the mounting formation to which a glazing bar can be mounted.

50. A wing member according to claim 49 wherein each of the first and second elements is in the form of an elongate strip which are secured together lengthwise of each other in face-to-face contact along a part of the width of each strip.

51. A wing member according to claim 49 wherein the mounting formation is in the form of an elongate open-topped channel, which can receive therein a part of a fastening means to fasten the glazing bar to the wing member.

52. A wing member according to claim 49 wherein each of the first and second elements further includes a portion of a pivot receiving formation, such



that the pivot receiving portions together form the pivot receiving formation to receive a pivot member.

53. A wing member according to claim 49 wherein the wing member further includes an upstanding portion which is formed from one of the first and second elements, the upstanding portion including a capping engaging region formed from a folded section of the upstanding portion.

54. A wing member according to claim 53 wherein the folded section includes a first folded member in which the upstanding portion is folded back upon itself, and further includes a second folded member in which the first folded member is folded back upon itself, whereby the second folded member is arranged between the upstanding portion and the first folded member.

55. A valley rafter assembly comprising first and second wing members, at least one of said wing members being as claimed in claim 49.

56. A valley rafter assembly according to claim 55 wherein both of the first and second wing members are as claimed in claim 49, and the first and second wing members are arranged in mirror image relationship with each other.

57. A valley rafter assembly according to claim 56 wherein the first and second wing members are movable relative to each other and the assembly includes a pivot to pivotally connect the first and second wing members together.

58. A bracket arrangement for connecting a first rafter assembly to a second rafter assembly, the bracket arrangement comprising a first bracket mountable on the first rafter assembly and a second bracket mountable on the second rafter assembly, and the arrangement further including securing means for securing the first bracket to the second bracket, wherein the first bracket comprises a first main portion and first holding means for holding the securing means in adjustable relationship relative to the first main portion, and the

second bracket comprises a second main portion and second holding means for holding the securing means in adjustable relationship relative to the second main portion.

59. A bracket arrangement according to claim 58 wherein the first holding means comprises a channel member defining an open-topped elongate channel for receiving a part of the securing means therein, the securing means being movable lengthwise of the channel.

60. A bracket arrangement according to claim 59 wherein the first holding means is pivotally attached to the first main portion and is so attached lengthwise of the first main portion.

61. A bracket arrangement according to claim 60 wherein the first holding means is pivotally attached to the first main portion by an elongate pivot pin.

62. A bracket arrangement according to claim 58 wherein the first main portion has a generally L-shaped profile, and the first holding means is mountable on the first main portion at the lower limb of the L.

63. A bracket arrangement according to claim 58 wherein the second holding means comprises an elongate projection extending from the second main portion and defining at the free end thereof a receiving member to receive a part of the securing means, said part of the securing means being movable within the receiving member to adjust the position of the second rafter relative to the first rafter.

64. A bracket arrangement according to claim 63 wherein the receiving member has an annular configuration and the projection may include an elongate member extending from each of the rafter engaging members to the receiving members.

65. A bracket arrangement according to claim 63 wherein the securing

means may be in the form of a bolt. The head of the bolt may be received in the channel of the channel member and the shank of the bolt may be received by the receiving member to be secured thereto by a nut.

66. A bracket arrangement according to claim 58 wherein the second main portion comprises a pair of rafter engaging members connected together by said elongate projection, whereby the rafter engaging members can be arranged one on either side of the rafter.

67. A bracket arrangement according to claim 57 wherein each of the first and second brackets is fastened to the respective first and second rafter assemblies by fastening means in the form of nuts and bolts, and each of the main portions of the first and second brackets defines an aperture through which the fastening means can extend.